

Attorney Docket No. CHEM-30134
Application No. 10/600,810
Amendment and Response

In the Claims

Please amend claims 1-13 and add new claims 20-21, as shown below. Please cancel claims 18-19.

1. (Currently Amended) A fire fighting foam concentrate comprising water and a high molecular weight acidic polymer (HMWAP) and a coordinating salt, the fire fighting foam concentrate providing a fire-fighting composition when mixed with water so that the fire-fighting composition does not form a stable seal on cyclohexane and meets UL 162, Class B performance criteria for at least one of AFFF agents and fluoroprotein (FP) agents without requiring organic fluorine.

2. (Currently Amended) The ~~foam~~ concentrate of claim 1, further comprising:

at least one of a fluorochemical surfactant, an amphoteric hydrocarbon surfactant, an anionic surfactant, a nonionic surfactant, a foaming aid, a freeze protection agent, a sequestering agent, a buffering agent, a corrosion inhibitor, a polymeric film former, an antimicrobial agent, a preservative, a polymeric foam stabilizer and a polymeric foam thickener.

3. (Currently Amended) The ~~foam~~ concentrate of claim 1, wherein:

the fire fighting composition meets UL 162, Class B performance criteria for both AFFF agents and fluoroprotein (FP) agents without requiring organic fluorine.

4. (Currently Amended) The ~~foam~~ concentrate of claim 1, wherein:

the ~~foam~~ concentrate has a HMWAP content that provides the fire fighting composition with from about 0.01 to about 0.3% HMWAP by weight of the fire fighting composition.

Attorney Docket No. CHEM-30134
Application No. 10/600,810
Amendment and Response

5. (Currently Amended) The ~~foam~~ concentrate of claim 1, wherein:

the ~~foam~~ concentrate has a coordinating salt content that provides the fire fighting composition with from about 0.1 to about 1.5% of the coordinating salt by weight of the fire fighting composition.

6. (Currently Amended) The ~~foam~~ concentrate of claim 1, further comprises a fluorochemical surfactant, and wherein the ~~foam~~ concentrate has a fluorine content provided from the fluorochemical that provides the fire fighting composition with less than about 0.006% fluorine by weight of the fire fighting composition.

7. (Currently Amended) The ~~foam~~ concentrate of claim 1, wherein the ~~foam~~ concentrate is used in an amount of from about 1 to about 10 parts concentrate to about 90 to about 99 parts water to form the fire fighting composition.

8. (Currently Amended) The ~~foam~~ concentrate of claim 1, wherein the ~~foam~~ concentrate has a fluorine content that provides the fire fighting composition with less than about 0.002% fluorine by weight of the fire fighting composition.

9. (Currently Amended) The ~~foam~~ concentrate of claim 1, wherein the ~~foam~~ concentrate has a fluorine content that provides the fire fighting composition with less than about 0.001% fluorine by weight of the fire fighting composition.

10. (Currently Amended) The ~~foam~~ concentrate of claim 1, wherein the fire fighting composition has a spreading coefficient against cyclohexane of zero or less.

11. (Currently Amended) The ~~foam~~ concentrate of claim 1, wherein the ~~foam~~ concentrate has a HMWAP content that provides the fire fighting composition with from about 0.03 to about 0.2% HMWAP by weight of the fire fighting composition, and wherein the ~~foam~~ concentrate has a coordinating salt content that provides the fire

Attorney Docket No. CHEM-30134
Application No. 10/600,810
Amendment and Response

fighting composition with from about 0.12 to about 1.2% of the coordinating salt by weight of the fire fighting composition.

12. (Currently Amended) The ~~foam~~ concentrate of claim 1, wherein the coordinating salt includes those selected from salts and electrolytes of aluminum, antimony, barium, boron, calcium, copper, iron, magnesium, calcium, strontium and zinc.

13. (Currently Amended) The ~~foam~~ concentrate of claim 1, wherein the HMWAP includes those polymers having C4 to C22 alkyl branching and having an average MW of from 5000 or greater.

14. (Original) A fire fighting composition comprising water, a high molecular weight acidic polymer (HMWAP) and a coordinating salt, the fire fighting composition meeting UL 162, Class B performance criteria for at least one of AFFF agents and fluoroprotein (FP) agents without requiring organic fluorine and that does not form a stable seal on cyclohexane.

15. (Original) The fire fighting composition of claim 14, further comprising:

at least one of a fluorochemical surfactant, an amphoteric hydrocarbon surfactant, an anionic surfactant, a nonionic surfactant, a foaming aid, a freeze protection agent, a sequestering agent, a buffering agent, a corrosion inhibitor, a polymeric film former, an antimicrobial agent, a preservative, a polymeric foam stabilizer and a polymeric foam thickener.

16. (Original) The fire fighting composition of claim 14, wherein:

the fire fighting composition meets UL 162, Class B performance criteria for both AFFF agents and fluoroprotein (FP) agents without requiring organic fluorine.

Attorney Docket No. CHEM-30134
Application No. 10/600,810
Amendment and Response

17. (Original) The fire fighting composition of claim 14, wherein the HMWAP content is from about 0.01 to about 0.3% by weight of the fire fighting composition, and wherein the coordinating salt content is from about 0.1 to about 1.5% by weight of the fire fighting composition.

18. (Canceled)

19. (Canceled)

20. (New) The concentrate of claim 1, wherein:

the coordinating salt is a polyvalent salt.

21. (New) The concentrate of claim 14, wherein:

the coordinating salt is a polyvalent salt.